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**FACTORS INFLUENCING THE SATISFACTION OF INTERNATIONAL
STUDENTS IN UNIVERSITI UTARA MALAYSIA TOWARDS MOBILE
OPERATORS**



UUM

Universiti Utara Malaysia
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MASTER OF SCIENCE (MANAGEMENT)

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**FACTORS INFLUENCING THE SATISFACTION OF INTERNATIONAL
STUDENTS IN UNIVERSITI UTARA MALAYSIA TOWARDS MOBILE
OPERATORS**



**Thesis Submitted to Othman Yeop Abdullah Graduate School of Business,
Universiti Utara Malaysia, in Partial Fulfilment of the Requirement for the
Master of Science (Management)**



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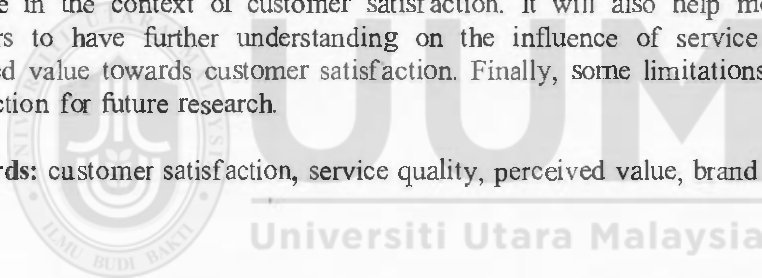
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ABSTRACT

The number of international students studying in Malaysian institution of higher education is constantly growing. The vast number of international students in Malaysia has supported not only to the country's education sector, but the telecommunication industry as well. Since, telecommunication market in Malaysia has been privatized, it has resulted in intense competition among market players and mobile service operators concern to retain their customer and attract new ones. Therefore, satisfying customer has been recognized as the best way to win the competition. Additionally, studies on international student satisfaction are still limited in number, although the issue is seen as important. The purpose of this study is to examine the relationship between service quality, perceived value, and brand awareness towards customer satisfaction in mobile service operators in Malaysia. The respondent of this study is the international students in UUM. A total of 340 questionnaires were distributed to international students in UUM, Sintok. Only 261 were useable for analysis. The data was analysed using SPSS 25 to achieve the objectives of the study. The finding of this study has revealed that service quality and perceived value have significantly positive relationship with customer satisfaction. However, the brand awareness has negative relationship with customer satisfaction. Furthermore, the research framework of this study will contribute the literature in the context of customer satisfaction. It will also help mobile service managers to have further understanding on the influence of service quality and perceived value towards customer satisfaction. Finally, some limitations have paved the direction for future research.

Keywords: customer satisfaction, service quality, perceived value, brand awareness



ABSTRAK

Bilangan pelajar antarabangsa yang belajar di institusi pengajian tinggi Malaysia sentiasa berkembang. Pertambahan besar pelajar antarabangsa ini bukan sahaja memberi sokongan kepada sektor pendidikan negara tetapi beberapa industri lain termasuk industri telekomunikasi. Memandangkan pasaran telekomunikasi di Malaysia telah diswastakan, ia telah mengwujudkan persaingan yang sengit di kalangan pemberi perkhidmatan. Syarikat telekomunikasi begitu memberi perhatian untuk mengekalkan pelanggan dan menarik pelanggan yang baru. Oleh yang demikian, kepuasan pelanggan telah diiktiraf sebagai cara terbaik untuk memenangi persaingan ini. Walau bagaimanapun, sehingga kini kajian ke atas kepuasan pelajar antarabangsa terhadap syarikat telekomunikasi masih terhad sungguhpun isu ini dilihat sebagai penting. Kajian ini mengkaji hubungan di antara kualiti perkhidmatan, persepsi nilai dan kesedaran jenamanya dengan kepuasan pelanggan pengendali perkhidmatan mudah alih di Malaysia. Responden kajian ini merupakan pelajar antarabangsa di UUM. Sejumlah 340 borang soal selidik telah diedarkan kepada pelajar antarabangsa di UUM, Sintok. Hanya 261 soal-selidik sahaja boleh digunakan bagi tujuan analisis data. Data dianalisis menggunakan SPSS 25 untuk mencapai objektif kajian. Dapatan kajian ini telah mendapati bahawa kualiti perkhidmatan dan persepsi nilai mempunyai hubungan yang positif dan signifikan dengan kepuasan pelanggan. Waiau bagaimanapun, kesedaran jenama mempunyai hubungan negatif dengan kepuasan pelanggan. Selain itu, kerangka kerja penyelidikan kajian ini memberi sumbangan kesusasteraan dalam konteks kepuasan pelanggan. Ia juga bakal membantu pengurus perkhidmatan mudah alih untuk mempunyai kefahaman yang lebih baik mengenai pengaruh persepsi nilai terhadap kepuasan pelanggan dan kualiti perkhidmatan. Akhirnya, beberapa limitasi telah membuka hala tuju penyelidikan pada masa hadapan.

Universiti Utara Malaysia

Kata kunci: kepuasan pelanggan, kualiti perkhidmatan, persepsi nilai, kesedaran jenama

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TABLE OF CONTENT

PERMISSION TO USE	i
ABSTRACT	ii
ABSTRAK	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
 CHAPTER ONE : INTRODUCTION	 1
1.1 Background of the study	1
1.2 Problem Statement	3
1.3 Research Questions	8
1.4 Research Objectives	8
1.5 Significant of the study	9
1.5.1 Theoretical Contributions	9
1.5.2 Practical Contributions	9
1.6 Scope of the Study	10
1.7 Operational Definition	10
1.8 Organization of the Study	11
 CHAPTER TWO: LITERATURE REVIEW	 12
2.1 Introduction	12
2.2 Telecommunication Industry	12
2.3 Customer Satisfaction	15
2.3.1 Definition of Customer Satisfaction	15
2.3.2 Importance of Customer Satisfaction	16
2.3.3 Customer Satisfaction Measurement	17
2.4 Service Quality	19
2.4.1 Definition of Service Quality	19
2.4.2 The Importance of Service Quality Towards Customer Satisfaction	20
2.4.3 Measurement of Service Quality	21
2.5 Perceived Value	22
2.5.1 Definition of Perceived Value	22
2.5.2 The Importance of Perceived Value Towards Customer Satisfaction	23
2.5.3 Measurement of Perceived Value	24
2.6 Brand Awareness	25
2.6.1 Definition of Brand Awareness	25
2.6.2 The Importance of Brand Awareness Towards Customer Satisfaction	26
2.6.3 Measurement of Brand Awareness	27
2.7 Conceptual Framework	29
2.8 Hypothesis Development	30
2.8.1 Service Quality	30
2.8.2 Perceived Value	30
2.8.3 Brand Awareness	31

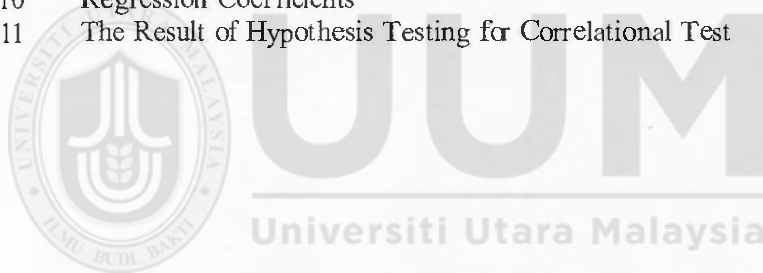
2.9	Conclusion	31
CHAPTER THREE: RESEARCH METHODOLOGY		32
3.1	Introduction	32
3.2	Research Design	32
3.3	Population and Sample Technique	33
	3.3.1 Population	33
	3.3.2 Sample Technique	33
3.3	Unit Analysis	34
3.4	Measurement of Variable	34
	3.4.1 Instrument of Service Quality	35
	3.4.2 Instrument of Perceived Value	35
	3.4.3 Instrument of Brand Awareness	36
	3.4.4 Instrument of Customer Satisfaction	37
3.5	Data Collection Method	37
3.6	Reliability and Validity Measurement	38
	3.6.1 Reliability	38
	3.6.2 Validity	38
3.7	Pilot Test	39
3.8	Statistical Analysis	39
3.9	Conclusion	40
CHAPTER FOUR: FINDINGS		41
4.1	Introduction	41
4.2	Response Rate	41
4.3	Data Screening and Cleaning	42
4.4	Demographic Profile	42
4.5	Preliminary Analysis	45
4.6	Descriptive Analysis	45
4.7	Outliers	46
4.8	Normality Test	47
4.9	Multi-collinearity	48
4.10	Homoscedasticity	49
4.11	Hypothesis Testing	50
	4.11.1 Pearson Correlation Analysis	50
	4.11.2 Multiple Regression Analysis	52
4.12	Conclusion	54
CHAPTER FIVE: DISCUSSION RECOMMENDATION AND CONCLUSION		55
5.1	Introduction	55
5.2	Summary of the Findings	55
	5.2.1 Service Quality and Customer Satisfaction	56
	5.2.2 Perceived Value and Customer Satisfaction	57
	5.2.3 Brand Awareness and Customer Satisfaction	58
5.3	Implication of the Study	59
	5.3.1 Theoretical Implications	58
	5.3.2 Practical Implications	60
5.4	Limitation of the Research	60
5.5	Recommendations for Future Research	61
5.6	Conclusion	61

Reference	62
Appendices	68
Appendix 1: Questionnaire	72
Appendix 2: Normality (Graphical Method)	77
Appendix 3: Residual Plot	78
Appendix 4: Sample Size	79



LIST OF TABLES

Table 2.1	Cellular Telecommunication Market Composition	14
Table 3.1	Sources of measurement	34
Table 3.2	Instrument of service quality Items	35
Table 3.3	Instrument of perceived value Items	36
Table 3.4	Instrument of Brand awareness Items	36
Table 3.5	Instrument of customer satisfaction Items	37
Table 3.6	Result for Reliability for Pilot Test	39
Table 3.7	Analysis to Answer the Research Questions	40
Table 4.1	Summary of Distributed Questionnaires	42
Table 4.2	Respondent's profile	43
Table 4.3	Descriptive Statistics for the Variables	45
Table 4.4	Normality analysis: Skewness and Kurtosis Ratio	47
Table 4.5	Tolerance and VIF Collinearity Statistics	48
Table 4.6	Correlation Value and the Strength of Relationship	51
Table 4.7	The Results of Pearson Correlation Analysis	52
Table 4.8	The Result of Hypothesis Testing for Correlational Test	52
Table 4.9	Summary of the standard multiple regression Model	53
Table 4.10	Regression Coefficients	54
Table 4.11	The Result of Hypothesis Testing for Correlational Test	54



LIST OF FIGURES

Figure 3.1	Research Framework	29
Figure 4.1	Residual Plots	49



LIST OF ABBREVIATIONS

UUM	Universiti Utara Malaysia
SPSS	Statistical Procedure for Social Science
MCMC	Malaysian Communications and Multimedia Commission
HEA	Academic Affairs Department
CSI	Customer Satisfaction Indexes
SQ	Service Quality
PV	Perceived Value
BA	Brand Awareness
CS	Customer Satisfaction



CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

In the past few decades, the service sector has been made substantial development that contributed to national economic growth (Husain & Suchy, 2013). Telecommunication sector is part of those sectors that have been increasing extensively and providing social and economic benefits which made the mobile phone providers as one of the most significant growing industry in the world.

According to Husain and Suchy (2013), mobile service providers have been playing a crucial role in transmitting information around the world. The use of telecommunication service has made it easy the social interaction among individuals, organisation and community which in turn the international environment connected broadly. Additionally, mobile service providers not only perform calling service, but they perform basic service like internet service and multimedia. This advantage gives telecommunication service firms to become the growing industry in the worldwide market. Thus, telecommunication service is an inseparable part of our whole life.

A survey that has been employed in Budde Cornrn website indicates that Asia has half of the world's mobile users and many clients have accessed broadband services via their mobile telephone. For this reason, the number of telecommunication users is highly increasing (Haque & A.Rahman, 2010). On the other hand, the telecommunication service business in Malaysia is growing rapidly (Ramalingam, Karim, Piaralal, & Singh, 2015). The mobile phone has become attached to the people

and performing more than their fundamental role of communication and this is due to the constant improvement of the telecommunication sector.

In Malaysia, according to the report made by Malaysian Communications and Multimedia Commission (2015), the largest three mobile service providers are DiGi, Maxis, and Celcom where fierce competition among firms exists to attract a large number of customers. The market shares of the firms are counted as follows: for instance, Celcom, has 12.3 million users and it is the largest market share of the mobile market (31.3%) by mid-2015, then, Maxis has also 31% and lastly DiGi is in third place with 30% market share. This growth in the telecommunication sector is due to convenience, affordability and easy adaptation with changing lifestyles in various countries (Chang & Chong, 2011).

Since the number of Malaysian mobile service providers in the market is increasing, consumers will have opportunities to choose many firms and become more sensitive to various factors before selecting mobile operators. Solomon, Bamossy, Safeguard and Hogg (2013), argued that customers has relatively higher expectation of what the service performance should be. They often believe that most brands perform similarly, so they weigh product value heavily when they select a brand.

International students are the most significant part of the telecommunication industry in Malaysia. According to Kamaruddin and Hashim (2016), the number of international student in Malaysia will increase to 200000 by 2020. This growth poses significant opportunities, particularly economic growth and cultural diversity. Thus, mobile operators should understand the international students' need when marketing to their customers (Pandian, Baboo, & Mahfoodh, 2016). Furthermore, Kamaruddin

and Hashim (2016), had mentioned that international students are recognised as attractive potential customers that contribute RM19 billion on the Malaysian economy. For this reason, International students can be an excellent opportunity for mobile operators to expand their business growth.

Several studies conducted by Salah, and Mohmood (2012), stated that customer satisfaction is an essential factor in today's business success and it has a direct effect on firm's market share, loyalty and profitability. For this reason, achieving customer satisfaction is the primary goal of every business. Many researchers, Dobrota, Nikodijević, and Mihailović (2012), have devoted much attention to customer satisfaction particularly, telecommunication providers because satisfying customer effects on the firm's profitability. This study has set its objectives to investigate the factors that affect the satisfaction of international student towards mobile service providers in Malaysia. Therefore, this research was designed to examine the relationship between the independent variable of the study (service quality, perceived value, brand awareness) and the dependent variable of (customer satisfaction).

1.2 Problem Statement

Nowadays mobile phones have made a significant contribution to the development of the communication system in the world (Bayraktar, Tatoglu, Turkyilmaz, Delen & Zaim, 2012). Smartphones is also playing a vital role in exchanging information and became indispensable for people that make international environment broadly networked (Haque, Rahman et al., 2010).

Several studies have been indicated the need for examining the customer satisfaction and loyalty (Deng et al., 2010; Verkasalo, 2010; Lee, 2011) in doing so, customer satisfaction plays a crucial role in mobile service providers as it maintains and develops their profitability (Dobrota, Nikodijević, & Mihailović, 2012).

According to Fornell et al. (1996), that customer satisfaction has a direct effect on the firm's profitability and loyalty. Meanwhile, improving the satisfaction of customer will increase the market share. Furthermore, Fornell et al. (1996), also mentioned that satisfied customer would repurchase many products and share a positive or negative experience with others. Therefore, customer satisfaction has a direct effect on the firm's profitability and customer loyalty.

The economic environment for the telecommunication industry in Malaysia is seen as significantly growing (Ramalingam, Karim, Piaralal, & Singh, 2015). This growth is mainly driven by the increase of a number of the mobile service user in Malaysia (Chang & Chong, 2011). Mobile service providers concerned to improve their quality of service to retain and attract potential customer. A report made by Malaysian Communications and Multimedia Commission (MCMC) (2011), mentioned that telecommunication service attracted many customers due to its convenience, affordability and in keeping with changing lifestyles in the country. However, a survey about customer satisfaction undertaken by Malaysian Communications and Multimedia Commission (MCMC) (2007), highlighted that telecommunication operators in Malaysia are required to develop their service mainly, the quality of their networking system, the coverage of their geographical network and make faster the connection speed.

Since the telecommunication industry in Malaysia has been privatised, many firms took licenses, and there is enormous competition among mobile service operator which made to consider customer satisfaction essential for a firm's success (Agarwal, and Erramilli, et al., 2003). The fierce completion in this market has resulted in reducing firms prices of prepaid stare kits; free air time offers for prepaid customers and lower SMS tariffs, moreover the competition does not only increase benefits to the customer but also makes the price cheaper. (Chang & Chong, 2011).

On the other hand, some researchers Achour, Said, and Boerhannoeddin (2011), mentioned that telecommunications service is experiencing a decline in its customer's base two to four percent monthly which in turn, leads to lower its profitability. Additionally, the quality of internet speed was not designed to meet the expectation of the customer. Meanwhile, Malaysia has listed the world's top ten countries weak internet connection compared to Vietnam and Cambodia (Chin, 2014). Therefore, it is disastrous for the telecommunication industry in Malaysia to ignore those issues that are fundamental to the success of any company.

Most organisations turn to be customer-centric and initiatives program to develop a long-term relationship with customers through keeping and growing customer service (Kotler, 2006). Firms try not only acquiring customers but also keeping existing customers. In this regard, according to Naumam (1995), mentioned that getting a new customer will cost five times than retaining and existing ones. Thus, building customer relationship management will help long-term success. In line with these issues, the objective of this study was set to determine the predicting variables of customer satisfaction in the telecommunications industry in Malaysia.

It should be noted that the number of international student in Malaysia will exceed 200,000 in 2020 (Kamaruddin & Hashim, 2016). This growing number will create many opportunities particularly, social and economic benefits. Mobile operators should perceive the international students' preference when marketing to their customers (Pandian, Baboo, & Mahfoodh, 2016). According to Kamaruddin and Hashim, (2016), stated that international students are seen as great potential customers that support to RM19 billion on the Malaysian economy. Therefore, International students can be tremendous opportunity for mobile providers to increase their business growth.

According to Messaoud (2017), stated that many international students at Universiti Utara Malaysia use different cellular mobile service operators based on a specific characteristic being offered by mobile service providers. International students need necessary information about the mobile service providers before they decide to use their service. Kumasey (2014), mentioned that international students as foreign customers, often value firms that provide higher benefits when they decide to choose mobile operators.

Several studies have been conducted about factors influencing customer satisfaction with mobile service (Dobrota, Nikodijević, & Mihailović, 2012). A study conducted by Tan, Oriade and Fallon (2014), on Chinese fast food indicated that quality of service is recognised as the most critical factor for satisfying customers and found that it has significantly relates to customer satisfaction. Mobile phone users are increasingly demanding quality service that corresponds exactly to their specific needs and preference. The quality of service is one of the factors that switch

customers to one firm to another. Thus, most firms improve their service quality to maintain market share and gain competitive advantage.

Similarly, According to Salleh, and Mahmood (2012), undertaken a study on Yemeni telecommunication and found that the perceived value is significant in satisfying customers. The study pointed out that perceived value has a significant relationship with customer satisfaction. Additionally, Li, Huang, Tan, and Wei (2013), stated that customers continuously evaluate the perceived benefits before they intend to use a particular product or service. They also take into account user costs, lost opportunity to use other offers, potential switching costs, service quality and promotion.

Another study conducted by Poranki (2015), in India mentioned that brand awareness has a direct effect on customer satisfaction. Poranki (2015), claims that when the customer is more familiar with a brand, the extent to use or purchase the product is also high. Therefore, this study seeks more contribution to the literature, particularly, in the context of international student satisfaction. Since, no previous studies have combined the variables of service quality, perceived value and brand awareness as factors of influencing customer satisfaction on one single research framework.

Releasing the telecommunication service provider in Malaysia, it is an emerging and developing industry that contributes directly to the national economy and considered one of those sectors that have seen significant growth and since, previous research only focuses on one variable in one single research. Therefore, this study addresses to examine the combination of factors such as service quality, perceived value and brand awareness that influence customer satisfaction particularly, international student context.

1.3 Research Questions

In the attempt to examine factors that influence the satisfaction of international students towards mobile operators, this study will seeks to answer the following questions:

1. Is there a significant relationship between service quality and customer satisfaction?
2. Is there a significant relationship between perceived value and customer satisfaction?
3. Is there a significant relationship between brand awareness and customer satisfaction?

1.4 Research Objectives

In order to examine factors influencing the satisfaction of international students towards Mobile operators, this study set following objectives:

1. To examine the significant relationship between service quality and customer satisfaction.
2. To examine the significant relationship between perceived value and customer satisfaction
3. To examine the significant relationship between brand awareness and customer satisfaction.

1.5 Significant of Study

This research aims to examine the factors that influence the satisfaction of international student in Universiti Utara Malaysia. The findings of this study will be useful for improving the mobile service providers. The study can provide the following practical and theoretical contributions.

1.5.1 Theoretical Contribution

The findings of this research will contribute to the literature on marketing. More specifically, customer satisfaction. The study will expand the understanding of the body of knowledge in the context of the student satisfaction among in mobile service providers in Universiti Utara Malaysia. Moreover, the result of the study is expected to expand the knowledge of empirical study about the relationship between service quality, perceived value and brand awareness to customer satisfaction. Further, the study can also provide information on international student satisfaction on the mobile service providers in Malaysia.

1.5.2 Practical Contribution

The result of this study will assist telecommunication officers to understand the satisfaction of the international students on their service. It can also help managers to design marketing strategies and be able to set up packages for the international students based on their satisfaction. In short, mobile service providers could use this result to enhance their observation on the international student in Malaysia as their potential customers.

1.6 Scope of the Study

This research aims to investigate the determinant aspects of the satisfaction of international student in Universiti Utara Malaysia towards mobile service providers. Due to the time constraints, international students in the north of Malaysia were chosen as target population of study particularly in the context of UUM student. The study covers the three independent variables namely service quality, perceived value and brand awareness and the population of the study is 2467 and the sample is 340. This study only focuses on several companies that have been operating in Malaysia namely Celcom, DiGi, U mobile, Maxis and so forth.

1.7 Operational Definition

Customer Satisfaction: The customer satisfaction is defined as an "evaluation of the perceived discrepancy between prior expectations and the actual performance of the product"(Tse and Wilton, 1988, Oliver 1999).

Perceived Value: Perceived value refers to "the consumer's overall evaluation of the usefulness of a product based on perceptions on what is received and what is given" (Heinonen, 2004).

Brand Awareness: Brand awareness refers to "the ability of buyers to recall or identify that a particular brand name is a member of a certain product category" (Aaker, 1991).

Service Quality: Service Quality is defined as "the outcomes from the comparison of customer's expectation with the perceived performance of services" (Parasuraman et al., 1988).

1.8 Organization of Study

This research is to investigate the influencing predictors of a customer satisfaction among international student in Universiti Utara Malaysia towards mobile operators, which encompasses Five chapters, all together chapter One covers the research background. Chapter One covers the research background of the study, the problem statement, the research question, research objectives, significance of the study, then the scope of the study, an organisation of the study. Chapter Two discusses the literature review on which information gathered from past and present researches that are related to this study. Chapter Three focuses on building a theoretical model. This chapter also discusses research design, population & sampling, measurement of variables, the scale of measurement, data collection method, reliability and validity of measurement, pilot test, and statistical analysis. Analytical techniques are introduced, the tools used to collect the data are discussed, and the procedures used to obtain and assess the data are described. Reliability and validity of the instrument are also provided. Chapter Four reports provide analysis and findings of this study. Finally, chapter Five draws the conclusions and contributions of this study, and lastly, the research limitations and direction for future research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter will discuss the literature on the critical aspects of telecommunication mobile service industry then, the next section discusses the dependent variable of customer satisfaction will explain briefly together with the independent variable of study service quality, perceived value and brand awareness will also be discussed lastly, the hypothesis of study and conclusion of study will be presented.

2.2 Telecommunication Industry

In recent years, the telecommunication industry in Malaysia is hugely proliferating. This growth is due to the changing technical advancement and the emergence of many mobile phone service providers that make the market as one of the developing industries in Malaysia (Ramalingam, Karim, Piaralal, & Singh, 2015).

The Malaysian government initiated a privatisation programme particularly telecommunication industry to develop and make the operation more effective and competitive. As a step towards the achievement of Malaysia's Vision 2020, the government has created policies to open the market in order to gain efficiency means of developing nation's economic growth (Yee, Ling & Leong, 2015). Therefore, the telecommunication industry is seen as a substantial contributor to the nation's economy and one of the developing industries in the world (Karim, Piaralal, & Singh, 2015).

Since the telecommunication industry has been privatised, many firms have attracted to exploit this market opportunity and expand their profitability. The government's initiation resulted in a furious competition that made extensive benefits to customers through increasing quality service, lower price and availability of various services. Moreover, mobile phone services have become necessary services that are an essential need of all people. Therefore, telecommunication firms are accepted as the most competitive market in the service sector.

According to Yee, Ling and Leong (2015), there is stiff competition between mobile service providers, and the competition is mainly based on retaining many customers as possible. Which in turn the satisfaction of customer extremely important. Telecommunication business focuses on improving their quality of service which recognised as significant to customer satisfaction. Mobile service providers concern to understand the basic needs of their customer to win the completion thus, it is essential for firms to give significant on the factors that increase customer satisfaction in order to survive their business.

According to the report made by the Malaysian Communications and Multimedia Commission (2013), Malaysian telecommunication industry is significantly growing and has gained strong demand everywhere in the country. This development has resulted in the intense rivalry between telecommunication service operators in Malaysia. Additionally, the competition is making mobile operators to develop best strategies towards the satisfaction of the customers. Therefore, Mobile service operators should know the importance of customer satisfaction when implementing strategies for retaining customers.

Today, many Malaysian mobile service providers in the market and customers value firms that provide high quality service when choosing mobile service operator. According to Solomon, Bamossy et al. (2013), claim that customers are more demanding products that they can obtain higher value increasingly willing to purchase things that offer them value as well as low price. Therefore, providing superior value is an essential factor for customers when selecting mobile service brands. Moreover, Salleh and Mahmood (2012,) mentioned that the telecommunications industry had been understood as highly customised customer contract, for this reason, studying customer satisfaction is an important to many scholars. The question of how to develop customer satisfaction is vital to mobile telecommunications firms. Thus, it is revealed that customer satisfaction plays a crucial role in telecommunication market competition. Considering the report of Malaysian Communications and Multimedia Commission (2015), the industry performance report 2015 was summarised as follows:

Table 2.1:

Cellular Telecommunication Market Composition

Operator	License Year of Issue	Percentage of Market Share (2015)
Celcom	1989	31.3%
Maxis	1993	31%
DiGi	1994	30%

Source: Industry Performance Report 2015 by SKMM (2015)

In Malaysia, the most significant three mobile service providers are DiGi, Maxis, and Celcom where fierce competition among firms exists to attract a large number of customers. The market share of the firms are counted as follows: for instance, Celcom has gained 12.3 million users and it is the dominant market share of the mobile market (31.3%) by mid-2015, followed by Maxis has also 31% and lastly, DiGi is in the third place with 30% market share.

2.3 Customer Satisfaction

This section explains the literature about dependent variable, customer satisfaction. It comprises the definition of customer satisfaction, the importance of customer satisfaction and the measurement of customer satisfaction.

2.3.1 Definition of Customer Satisfaction

Customer satisfaction is defined as an "assessment of the perceived discrepancy between prior expectations and the actual performance of the product" (Tse and Wilton, 1988, Oliver 1999). One of the main obstacles in today's manager mainly, the telecommunication sector is providing and maintaining the satisfaction of customers, and it has also been acknowledged as a critical factor for competitive differentiation and customer retention (Su, 2004).

Several studies have indicated that satisfying customers can assist the brand and contribute profitable long-term relationships with customers (Eshghi, Haughton and Topi, 2007). Some scholars believe satisfaction is an attitude or evaluation that is made by the customer when comparing their pre-purchase expectations of what they would obtain from product or service to the performance they would gain (Oliver, 1980). According to Salleh and Mahmood (2012), customer satisfaction is understood as the degree of accomplishment of expectations and the actual services provided by mobile phone service operators. Kotler (2003), also described that "satisfaction is a person's feelings of desire or displeasure resulting from comparing a product's perceived performance (or outcome) concerning his or her expectation". Moreover, Yi (1990) stated that customer satisfaction is a composite outcome of the perception, evaluation and psychological reactions to the consumption experience with a product or service. Having satisfied customer can lead to repurchase behaviour,

positive word-of-mouth, and eventually contributes to customer loyalty, profitability and market share. Therefore it the ultimate goal of every organisation as the concept of customer satisfaction relates to buyers expectation if it falls down customers will be dissatisfied. However, if the expectation is exceeded customers will be delighted. Therefore this study will examine factors affecting customer satisfaction.

2.3.2 Importance of Customer Satisfaction

Today's dynamic business environment, satisfying customers to firm's product and service is considered as one of the significant factors that create competitive advantage and business success (Hennig, Thureau & Klee, 1997). Any business which is likely to survive for long-term must have to implement the customer-centric program and continuously improve its operation that is vital for assessing and understanding customer desires. In short, the satisfying customer is seen as essential for most mobile service operators as it develops the firm's profit margin and loyalty (Su, 2004).

Several studies have identified that satisfying customer can assist brand image and build long-term rapport with customers (Eshghi, Haughton & Topi, 2007). According to Evangelos and Yannis (2010), indicated that the satisfaction of customers is the importance in business success. Zairi (2000), pointed out that customers are the primary purpose that most firms exist and most firms are much more dependent on them. Several authors indicated that customer satisfaction direct relationship with company profitability and improving customer satisfaction will increase the firm's market share.

According to Fornell et al (1996), states that customer satisfaction has a direct effect on the firm's profitability and loyalty. Meanwhile, improving the satisfaction of customer will increase the market share. Furthermore, Fornell et al. (1996), also mentioned that satisfied customer would repurchase many products and share a positive or negative experience with others. Therefore, customer satisfaction has a direct effect on the firm's profitability and customer loyalty.

2.3.3 Customer Satisfaction Measurement

Previous studies indicated that customer satisfaction is seen as essential for competitive differentiation and survival for all business types (Hanif, Hafeez, & Riaz, 2010). Today most firms perceived that retaining existing customer is less cost than attracting new customers. Most service firms continuous to invest a considerable amount of money in improving the level of satisfaction that leads to increasing for business profitability (Dobrota, Nikodijević, & Mihailović, 2012). Therefore, customer satisfaction is recognised as the optimal goal of every business. Increasing customer satisfaction will result to increase firms market share, profitability and build brand image. However, some authors Salah, and Mohmood (2012), highlighted that satisfaction itself would not only enough to firm's success and suggested to investigate deeply the factors affecting customer satisfaction.

According to Hill (1996), measuring customer satisfaction helps firms to understand what customer desires which lead to serve better. Hill (1996), also stated that "if you do not measure it, you do not manage it" however many organisations do not measure customer satisfaction, and they claim that measuring customer satisfaction is a subjective and inadequate way.

According to Amin, Yahya and Nasharuddin (2013), customer satisfaction can be measured to the price of the product and the value it provides a significant factor that contributes to the development of satisfaction. Moreover, providing better value and low prices are the most challenging issues in the service industry. Therefore the valid measurement of the firm's success is its ability to satisfy customer needs and consistency, for this reason, most firms are looking for ways to increase their value and reduce prices.

Another study by João (2003), argue that customer satisfaction measurement relates to customer's attitudes and perceptions of service quality they receive. This is because the tendency of product and service covers customer wants, and the requirement is the index by which quality is determined. Therefore, the perception of the customer towards service will help to understand the needs and preference of customers.

Following to Kursunluoglu (2014), stated that measuring customer satisfaction reflects some indexes from national customer satisfaction dimensions in different countries. The most widely used is the American Customer Satisfaction Index which is built in customer satisfaction indexes (CSI) model. Moreover, the model is focused on the assumptions that the satisfaction of the customer is made by specific aspects including customer's expectation, the firm's image, perceived quality (PQ) and perceived value (PV). Thus, those factors are the predictors of customer satisfaction and the model appraisals the result whether the customers are satisfied or not.

Similarly, Su (2004), conducted study on customer satisfaction and used to measure a set of questions on the customer satisfaction questionnaire. The questions were made on Likert type 1-7 and answering “how satisfied are and why not satisfied. Therefore, this study will use a set of questionnaire adapted from the previous study to investigate the predicting variable service quality and brand awareness towards the satisfaction of customers.

2.4 Service Quality

This section explains the literature about independent variable, service quality. It comprises the definition of service quality, the importance of service quality to customer satisfaction and the measurement of service quality.

2.4.1 Definition of Service Quality

According Parasuraman et al. (1988) described that “service quality as the outcome from the comparison of customer's expectation with perceived performance of services”. It is used as a strategic tool that helps business to distinguish among others firms in the marketplace and significant plays to attract many customers (Parasuraman et al., 1988). Another research conducted by Zeithaml et al (2011), defines merely that service quality is seen as the degree of excellence of service performance. Therefore, service quality has been considered as one of the significant effect on the telecommunication service and assists firms to be more competitive (Kushwah & Bhargav, 2014).

2.4.2 The Importance of Service Quality Towards Customer Satisfaction

In the last decades, the importance of service quality for customer satisfaction is getting considerable attention in many researchers and business managers (Salleh, & Mahmood, 2012). The quality of service has also been recognised as a significant contributor to the level of customer satisfaction. According to Brown and Swartz (1989), customers' desire and value for firms that offer better quality service, and it becomes like one of strategic tool that business distinguish their service among the competitors. Delivering high-quality service has been considered the best chances of attracting new customer and retaining existing ones (Brown & Swartz, 1989). Therefore, service quality is positively related to customer satisfaction (Kant & Jaywalk, 2017).

Similarly, some scholars studied the importance of service quality and found that many consumers concerning the quality of service than ever before. The intense rivalry among service firms also created some companies in the service industry to look effective means of becoming competitive (Tan, Oriade & Fallon, 2014). For this reason, increasing service quality is the best strategy for firms to achieve their objectives. According to Cronin and Taylor (1992), providing better service can assist firms to keep the existing customer and motivates repetitive consumer purchasing behaviour which eventually increases the firm's market share and produces high sales volume. Therefore, service quality was recognised as a source of competitive advantage that most firms strive to attain and many researchers give the service quality major area of attention as it affects the performance of the firms and increases customer satisfaction.

According to Tan, Oriade and Fallon (2014), business today cannot succeed unless to satisfy its customer and satisfying customer depends on the uniqueness of service quality that differs from its competitors. Tan, Oriad and Fallon (2014), stated that service quality is a strategic tool for achieving operational efficiency and improving business performance. It is vital for organisation success because it relates to customer satisfaction thus; the research wants to see if there is any influence of service quality toward the satisfaction of customers and how service quality influences customer satisfaction.

2.4.3 Measurement of Service Quality

In recent years, many researchers and business managers are interested in studying service quality literature because of its massive effect on the performance of many firms. Tan, Oriade, and Fallon (2014), telecommunication service firms concerned to develop service quality to keep and growth many consumers. Moreover, the quality of service is seen as the most critical factor that helps in getting a strategic tool for competitive differentiation, improve operational efficiency which ultimately leads to a competitive advantage (Tan, Oriade and Fallon, 2014). Some authors Dobrota, Nikodijević, and Mihailović (2012), proclaimed that the quality of service concerns the comparison between the perception of the service and the expectation of the quality of the service.

According to Solomon, Bamossy et al. (2013), service quality relates to the expectation of customer and the perception of the perceived service. If expectations are exceeded than performance, therefore, customers are dissatisfied and cause to decline profitability. Parasuraman et al. (1985), indicates that the most admired question is: why do firms measure service quality? Measurement helps to assess

before and after changes, for the position of service quality related issues and the foundation of perfect standards for the delivery of service. According to Parasuraman et al (1985), states that, the most applied tool of measuring service quality is the SERVQUAL model that help to understand the dimensions of service quality such as tangibility, reliability, responsiveness, assurance and empathy. Therefore, this research will measure service quality using single unit items adapted from the study of (Cronin & Taylor, 1992).

2.5 Perceived Value

This section explains the literature about independent variable, perceived value. It comprises the definition of perceived value, the importance of perceived value to customer satisfaction and the measurement of perceived value.

2.5.1 Definition of Perceived Value

According to Heinonen (2004), described that perceived value as “the consumer’s overall evaluation of the usefulness of a product based on perceptions on what is received and what is given. Parasuraman et al. (1985), explained that perceived value is understood very personal and subjective and it is seen as a significant factor in gaining a competitive advantage. Another study by Zeithaml (1988), also defined customer perceived value as the outcome based on an individual comparison between the perceived costs paid by the customer and overall perceived benefits gained. Therefore, most buyers evaluate whether or not a product or service delivers value.

According to Rescher (1969), said that perceived value in the mobile content service and described as customer evaluation of the benefits of using a service grounded on perceptions and experience of the user that enable attaining the customer objectives in a specific situation compared to other alternatives. Thus, it is crucial to understand customer value to maintain customer satisfaction and gain competitive advantage.

2.5.2 The Importance of Perceived Value Towards Customer Satisfaction

Previous studies found customer value has been recognised as the determinant factor of customer satisfaction and consumer purchase intentions (Spreng, 1997; Ryu et al., 2008, McDougall and Levesque, 2000; Andreassen and; McDougall). Most customers evaluate the benefits obtained from the product to the cost of receiving it. For this reason, delivering high value is essential to increase the level of customer satisfaction. According to Park et. al. (2006), stated that the repetitive purchase of firms product depends on the amount of value it provides. This means that firm that provides higher value have higher customer satisfaction. Therefore, perceived value is a source of competitive advantage that most business strives to succeed.

Several authors such as (Chen and Dubinsky, 2003; Anderson and Srinivasan, 2003; Hellier et al., 2003), mentioned that customer perceived value had received significant consideration as it affects the consumer's purchase decision. Moreover, according to De Grewal et al. (2003,) and Hellier et. al (2003), indicates that consumer's perception of product value increases the desires to purchase and reduces their intentions to shift on competitors.

Other studies conducted by Chiou (2004), found that perceived value is accepted as a significant predictor on satisfying customer particularly, internet service provider. A study undertaken by Andreassen and Lindestad (1998), mentioned that perceived

value has a significant positive relationship with the satisfaction of customer in the service businesses. Additionally, according to Patterson and Spreng (1997) also proved that customer perceived value had a positive and direct correlation with the satisfaction of the customer and eventually leads to customer loyalty. Therefore, in this study, the researcher intends to examine how perceived values associated with customer satisfaction.

2.5.3 Measurement of Perceived Value

According to Cronin et al. (2000), customer perceived value has been considered in marketing literature as a vital concept affecting customer satisfaction and loyalty. Furthermore, a study conducted by Keng et al. (2007), also stated that providing superior value reflects the consumer appreciation and the performance of product this indicates that the service provider should maintain the value and performance. Thus, customer perceived value will help retaining customer's relationship management.

According to Roig et al. (2006), pointed out that customers understand that product value and producer cannot be determined in quantitative form. Only the customer can understand if the product or service provides value or not. For this reason, measuring perceived value help firms to understand the feedback from the customer towards benefited they obtained from the product.

The importance of measuring perceived value has been identified as both multidimensional method and unidimensional methods in previous literature. unidimensional method directly focuses on one single item. According to Chen (2013), has been found that perceived benefits (product benefits, social benefits and

emotional benefits) and perceived sacrifice (inconvenience value and risk) are standard measures of perceived value. However, some studies used unidimensional method adopted from previous literature. Therefore, this study will use to measure the perceived value set of an adapted questionnaire to obtain the relationship between customer perceived and customer satisfaction.

2.6 Brand Awareness

This section explains the literature about the third independent variable, Brand Awareness. It comprises the definition of brand awareness, the importance of brand awareness to customer satisfaction and brand awareness measurement.

2.6.1 Definition of Brand Awareness

According to Aaker (1991), brand awareness defines as the ability that customers identify or remember a particular brand name is a member of a specific product category. Previous studies indicate that if the awareness of the brand is high, it increases not only the awareness of that brand but also the confidence relates to that the brand will also be high. According to Laroche, and Zhou (1996), mentioned that if brand awareness is very high, the trust of that brand goes the same. Furthermore, Smith and Wheeler (2002), also states that brand awareness was accepted as a vital concept in marketing literature.

According to Keller (2003), defines brand awareness is the customer's ability to recognise or recall a brand among the clutter of competitor brands. Huang (2008), stated that brand awareness could strongly effect buyers when purchasing a product. Therefore, companies should understand strategies that they can exploit the benefits and build a positive corporate image in the mind of the customer.

2.6.2 The Importance of Brand Awareness Towards Customer Satisfaction

According to Poranki (2015), identified brand awareness is the degree in which a brand is recognised or accepted by prospective buyers, and is appropriately related to a particular product. Brand awareness can provide extremely beneficial outcomes for firms in the form of generating high sales volume, market share, profit margin and creating building a good image in the customer's mind.

Poranki (2015), also stated that brand awareness is significantly and positively related to customer satisfaction. It means once the customers are more familiar with a brand, the extent of the customer to purchase or use product is also high.

Several studies conducted by (Laroche, Kim, & Zhou, 1996) indicate that if consumers are more aware of the product, it leads high level of brand awareness which in turn to increase high level of confidence and trust on that brand. According to Macdonald and Sharp (2000) and Leong (1993), mentioned that brand awareness has a significant effect on consumer purchase intention because consumers believe that well-known brands are more reliable than unknown brand. This implies that consumer's preference is only gained when product receive a high level of brand awareness which in turn leads to high level of customer satisfaction (Dodds et al., 1991; Grewal et al., 1998).

Consumers bought a product when they satisfied and trust brands this also reflects the prior knowledge of that brand. Having good brand awareness can help firms to achieve their objective of increasing better quality and market share. (Dodds et al., 1991; Grewal et al., 1998). Another research conducted by Sharp and Macdonald (2000), shows that brand awareness is significant effect on consumers' attitude

towards firms' product. If consumers have a positive attitude on brand their confidence and satisfaction will also increase consumers will trust the brand and became loyal to it.

Previous studies Sharp and Macdonald (2000), mentioned that the awareness of the brand is a significant factor that influences on consumer purchase behaviour. Since, it can increase the possibility of buying a particular product than other. Marketers concerned the approaches to develop a high level of brand awareness. Generally, brand awareness can be categorised into two parties: recall and recognition. Recognition focuses on the ability of the consumer to confirm prior exposure to the brand when given the brand as a cue. While, Recall emphasis on to the ability of the consumer to recall from memory the brand when given the product category (Hoeffler & Keller, 2002).

According to Keller (1993), mentioned that brand awareness is also essential for two main reasons first it relates to the customer relationship management, second it influences the attitude of the customers when choosing a product. Considering the importance of building the brand in the consumer's mind, Skory et al. (2004), claimed that most firms have much emphasis on methods to increase brand awareness. Therefore, this research determines the influence of service quality, perceived value and brand awareness towards customer satisfaction.

2.6.3 Measurement of Brand Awareness

According to Percy (1987), indicated that brand awareness is an important factor because without brand awareness no communication at all and the transaction is not

possible. Additionally, many the consumers have the intention to purchase only popular brands in the market and feel that the familiar brand is more quality and reliable than unpopular brands (Keller, 1993). Therefore, if the organisation strives to win the competition, they should create desires for the consumer in order to purchase their brands (Chi & Yang, 2009).

A study undertaken by Gustafson and Chabot (2007), stated that once the business has excellent brand awareness in the market that leads to acquiring its product and service good reputation and simple acceptance. The awareness of the brand plays a vital role in purchasing product this means that customers prefer products that have higher brand awareness because they trust and gain satisfaction. For this reason, brand awareness increases the market share and quality evaluation (Dodds et al., 1991; Grewal et al., 1998). Moreover, brand awareness may have control and minimise the perception of purchasing risk and increase the level of assurance about the product because the product was tested and the consumer has no fear of losing their money. In short, the awareness of the brand is understood that the chance, consumers are aware of the accessibility and the availability of the firm's product and service.

According to Kapferer, Roussel and Laurent (1995), propose three standard measures of brand awareness. These product category are spontaneous awareness, aided awareness and top of mind awareness (using the similar question, the proportion of interviewees who name the brand first is considered) and, respectively, aided awareness (brand names are presented to interviewees – in this scenario case the aided awareness of a brand is the portion percentage of interviewees who indicate they know that brand).

Another study conducted by Aaker (1996,) proclaimed that brand awareness could be measured in various ways in which consumers identify a brand that may contain brand recognition, brand recall, top of the mind brand and dominant brand .the two main types of brand awareness: recognition and recall. Recognition focuses on the ability of the consumer to confirm prior exposure to the brand when given the brand as a cue. While, recall an emphasis on to the ability of the consumer to recall from memory the brand when given the product category (Hoeffler, & Keller, 2002). Thus, this study measures the brand awareness items adopted from the previous literature.

2.7 Conceptual Framework

This research investigates the determinant of customer satisfaction in which customer satisfaction is the dependent variable. The independent variables are service quality, perceived value and brand awareness. This study developed a model (as shown in figure 3.1) to show the relationship between the dependent variables (customer satisfaction) and independent variable (service quality, perceived value and brand awareness).The conceptual framework helps in ensuring greater understanding of independent variables which offers more understanding of the factors that influence the customer satisfaction.

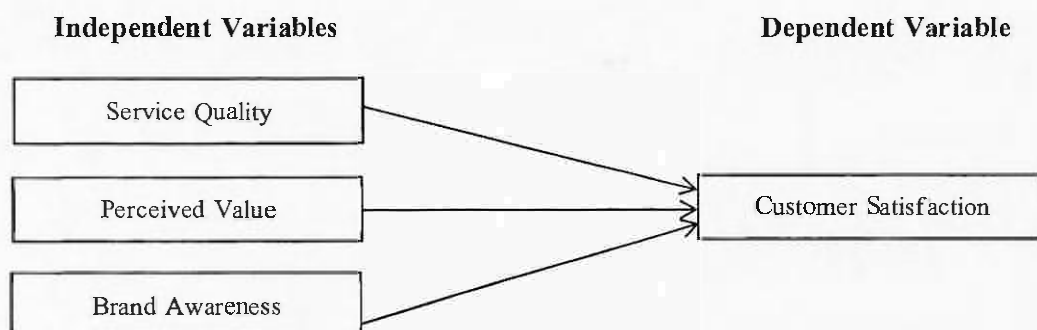


Figure 3.1 Conceptual framework

2.8 Hypothesis Development

In this study, the hypothesis has been chosen based on the literature review to define the relationship between those variables that have effect on customer satisfaction.

2.8.1 Service Quality

One of the critical factors that determine customer satisfaction is service quality. Service quality in this research means the outcomes from the comparison of the perceived performance of services and the expectation of customers (Parasuraman et al., 1988). According to Kim (2009), service quality is seen the significant predictors of satisfying customers. Increasing the quality of service often increases the level of customer satisfaction. Several researchers such as Kim et al (2009) and Min (2011), indicated that the quality of service is significantly correlated with customer satisfaction. These studies are consistency with another study which was also found that quality of service has positively correlated with customer satisfaction. (Khan & Fasih, 2014). Hence , service quality is a predictor of customer satisfaction and the research formulated this hypothesis.

H1: There is a significant relationship between service quality and customer satisfaction.

2.8.2 Perceived Value

Many scholars have been conducted research on perceived value towards customer satisfaction and found that customer perceived value has significant on customer satisfaction. (Ryu et al, 2010 and Chiou, 2004). Additionally, according to Anckar, Carlsson et al. (2003), perceived value is a significant aim that customers will use or refuse mobile phone service firms. Hence, the value of the firm is determined by the extent of greater benefits it provides to its cost.

Another study conducted Turel and Serenko (2006), in Canada found that customer perceived value has an essential correlation to customer satisfaction. Thus, this research developed this hypothesis

H2: There is a significant relationship between perceived value and customer satisfaction.

2.8.3 Brand Awareness

Brand awareness has been clearly explained by literature and has the relationship with customer satisfaction. According to Aaker (1991) described brand awareness is the buyers sensitivity to identify or remember that a particular brand name is a member of a specific product type and it is important factor that has high impact on consumers' purchasing decision (Rossiter & Percy, 1997; Hoyer & Brown, 1990; Nedungadi, 1990; Keller, 1993). Another study conducted by Kameswara, Rao Poranki (2014), has mentioned that it is difficult to identify products in the market without brand awareness. For this reason, the marketer may not understand the level of customer satisfaction. Therefore, based on the results of the previous study, this research developed the following hypothesis.

H3: There is a significant relationship between brand awareness and customer satisfaction.

2.9 Conclusion

To sum up, in this section the literature is thoroughly discussed. It discusses the variables of study and information from the previous literature and it ends with the development of hypotheses.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter summarizes the methodology of the research study. It illustrates the methods, instruments and techniques used for gathering data. The chapter will also attempt to discuss the research design, population and sample size, measurement variables, the scale of measurement, data collection method, reliability and validity of measurement and lastly statistical analysis.

3.2 Research Design

In this study, a quantitative research design is used. A quantitative research design involves mostly numerical data (Chua, 2012). The study aims to determine the relationship between the independent variable such service quality, perceived value and brand awareness towards the satisfaction of international students in UUM for mobile service providers in Malaysia. The research will also examine the relationship between how the independent variable is influencing the dependent variable. Thus, a structured questionnaire adapted from previous literature was used in order to retrieve the information and distributed to the international students in Universiti Utara Malaysia (UUM).

3.3 Population and Sampling Technique

3.3.1 Population

According to Sakaran (2013), the target population must be described regarding elements, geographical boundaries and time. The population of this study is international students in Universiti Utara Malaysia which compose of and undergraduate and post-graduate from different three Colleges namely, international student from different countries in three colleges: Government and International Studies and College of Law, College of Arts and Sciences, and the College of business. UUM Academic Affairs Department (HEA), April 2018 the total number of international students are 2647.

3.3.2 Sample Technique

In this study, the researcher used a simple random sampling method to obtain the data. Simple random sampling is a sampling design in which distinct items are selected from the items in the population in such a way that every possible combination of items is equally likely to be the sample selected (Thompson, 2012). The population target of this study is the international students in Universiti Utara Malaysia. The sample size is taken from the target population respondents; the estimation of the number of respondents selected from the university and randomly distributed the questionnaire among international students. The population of the study consists of 2647 international students in UUM then the sample size of 335 is to be used (Krejcie & Morgan, 1970).

3.3 Unit Analysis

The unit analysis is the level that data are used to represent one data point in the analysis. The appropriate unit analysis in this study is an individual level which are international students that use the telecommunication service in Malaysia.

3.4 Measurement of Variables

This study uses a set of the questionnaire as an instrument of the study. The questionnaire consists of two section, section A and Section B. Section A represents demographic variables of respondents such as gender, age, marital status, education level, nationality, schools and mobile operators. While section B. Focuses on independent variable and the measurement items were adopted from previous research, however, in order to the context of the study, some modification on words were made. The questionnaire contain in section B was measured by using five point Likert formatted scale the five-point scale ranging from strongly disagree to strongly agree and . Lastly, the variable and total number of items used to measure each of the variables is shown in Table 3.1

Table 3. 1

Sources of measurement

Section	Variable	Number of Items	Alpha	Sources of scale
A	Service Quality	7	0.920	(Cronin Jr & Taylor, 1992)
B	Perceived Value	5	0.840	(Edward & Sahadev, 2011; Ishaq, (2012)
C	Brand Awareness	5	0.723	(Akhtar, Ahmed, Jafar, Rizwan & Nawaz ,2016)
D	Customer Satisfaction	7	0.910	(Olorunniwo, 2006; Edward, & Sahadev 2011).

3.4.1 Instrument of Service Quality

Table 3.2 below shows the instrument of service quality. The table comprises of items of service quality instrument that were adapted from the previous research of (Cronin & Taylor, 1992). For this variable, the reliability coefficient reported is 0.920.

Table 3.2

Instrument of service quality Items

No	Items	Alpha
1	My current mobile phone service provider has update equipment	0.920
2	When my current mobile phone service provider promises to do something by certain time , it keeps its promise	
3	When I have problem, my service provider show sincere interest in solving it.	
4	My current mobile phone service provider provides its service at time it promises to do so.	
5	The staff at my current mobile phone service provider always willing to help customers	
6	The staff at my current mobile phone service provider customers service are often ready to responds to customer requests promptly	
7	The employee at my current mobile phone service provider is polite.	

3.4.2 Instrument of Perceived Value

Table 3.3 indicates the instrument of perceived value. The table shows items of perceived value that were adapted using the previous study (Edward & Sahadev, 2011; Ishaq, 2012). The following table presents items of perceived value. For this variable, the reliability coefficient reported was 0.84.

Table 3.3

Instrument of perceived value Items

S/No.	Items	Alpha
1	Comparing what I pay to the service I receive I think my service provider provides me good value	
2	This providers service is a better value for money	
3	The provider charges a reasonable price for the service they provide	
4	Compared to what I had to give up, the overall ability of the company to satisfy my wants and needs is high.	0.84
5	Overall, the value of firm service to me is high	

3.4.3 Instrument of Brand Awareness

Based on Table 3.4 below shows the instrument of brand awareness. The table comprises items of brand awareness that were adapted from the previous research of (Cronin & Taylor, 1992). All items are used on a five-point Likert scale. For this variable, the reliability coefficient reported is 0.723.

Table 3.4

Instrument of Brand awareness Items

No	Items	Alpha
1	I know how this mobile service provider brand looks like	
2	I can quickly recall the logo of this mobile service provider.	
3	When I think mobile service provider this mobile service provider come to my mind due to brand awareness	
4	This mobile service provider that I am using had well- known brands.	0.723
5	I am aware of this particular mobile service providers	

3.4.4 Instrument of Customer Satisfaction

Table 3.5 indicates the instrument of customer satisfaction. The table shows items of customer satisfaction that were adapted using the previous study of (Edward & Sahadev, 2011) and Ishaq (2012), below table presents items of perceived value and the reliability coefficient reported was 0.91.

Table 3.5

Instrument of customer satisfaction Items

S/No.	Items	Alpha
1	I am satisfied with my decision to choose mobile service	0.91
2	My choice to use this mobile operator is was nice one	
3	I feel I did the right thing when I chose this mobile service	
4	I feel that my experience with this mobile service has been enjoyable	
5	I am happy with my current service provider	
6	I feel good about my decision to choose my current service provider	
7	Overall, how much satisfied are you with your mobile service providers service	

3.5 Data Collection Method

Data collection is one of the vital processes in every research, and it can be defined as the process of collecting the necessary along with fitting data to this research study. By collecting the necessary data, it helps the researcher to accomplish the research objectives as well to answer the proposed hypothesis of the study (Sakaran, 2010).

The researcher distributed 340 questionnaires to international Universiti Utara Malaysia. The respondents were given one week to complete the form. Then, the researcher collected the questionnaire which 261 were completed and used the study.

3.6 Reliability and Validity Measurement

3.6.1 Reliability

Reliability is seen as principal criteria typically used in testing the goodness of measure. According to Schindler and Cooper (2003) reliability is representing the internal consistency demonstrating the homogeneity of an item in the measure, measuring the variables. Its primary objective is to test the internal consistency of the measuring instrument. Hair et al (2010), states that reliability focus on the extent to which the observed variable measured the “true “value and error free. In this study, Cronbach’s Alpha was utilised to examine the correlation between the items of measurement and internal consistency of each variable. According to Sakaran and Bougie (2010) indicated that reliability with Cronbach’s Alpha above 0.8 are taken, and good, from 0.6 to 0.7 are accepted, and those range from 0.1 to 0.49 are considered to be poor.

3.6.2 Validity

Face validity is recognized as an essential and minimum index of context validity. Some scholars do not see the necessities to be concerned with face validity as the element of validity subject (Sekaran, 2010). In this research, the validity of the questionnaire was employed through to expert. The feedback proposed that most of the measures revealed their conceptual content and thus, some indication of the validity of the variables was obtained in this study.

3.7 Pilot Test

The pilot test has been made a week before the real survey being conducted. The 25 respondents were selected among the international student of Universiti of Utara Malaysia. The questionnaires were directly distributed to the respondents. The outcome confirmed that all the variables are reliable in this research study. Based in Table 3.6, it shows that all the variables attained a high test of the reliability coefficient that ranges from 0.845 to 0.898.

Table 3.6
Result of Reliability for Pilot Test

Variables	Number of Items	Croubach's' Alpha
Service Quality	7	0.848
Perceived Value	5	0.845
Brand Awareness	5	0.898
Customer satisfaction	7	0.879

3.8 Statistical Analysis

Data collected from the questionnaire, they are coded for data entry in a statistical package for Social Science (SPSS) version 25.0. Before entering the data, all the questionnaire returned by the respondents were carefully analysed. This is to ensure the respondents meet the study criteria; based on a copy of the distributed questionnaire only a complete questionnaire will be analysed.

Table 3.7

Analysis to Answer the Research Questions

Research Questions	Research Objectives	Hypothesis	Type of analysis
Is there any relationship between service quality and customer satisfaction	To examine the relationship between service quality and customer satisfaction	There is a significant relationship between service quality and customer satisfaction.	Correlational Analysis
Is there any relationship between perceived value and customer satisfaction	To examine the relationship between perceived value and customer satisfaction	There is a significant relationship between perceived value and customer satisfaction	Correlational Analysis
Is there any relationship between Brand awareness and customer satisfaction	To examine the relationship between Brand awareness and customer satisfaction	There is a significant relationship between Brand awareness and customer satisfaction	Correlational Analysis

3.9 Conclusion

In conclusion, this chapter discussed the research methodology followed by research design, population and sampling measurement of a variable, scale of measurement, data collection method, reliability and validity of measurement and statistical analysis collected in this study.

CHAPTER FOUR

THE FINDINGS

4.1 Introduction

This chapter discussed the data analysis and research findings of the study. The data analysis was carried out with the statistical package for social science (SPSS) version 25, and descriptive statistics have utilized in this study to analyse the demographic information of respondents. This chapter also comprises of analysis of response rate, data screening and cleaning, descriptive analysis, correlation analysis, and multiple regression analysis.

4.2 Response Rate

The target respondents for this research are the international student in Universiti Utara Malaysia. Table 4.1 demonstrates the summary of the collected questionnaires from to international students in UUM. A set of three hundred and forty copies of questionnaires were given to the respondents. The total population of the study is 340 respondents. Out of population, 261 responses (77%) were recognised as sample size. This is because only 261 responses are representing the sample size of the study proposed by Krejcie and Morgan (1970).

Table 4.1

Summary of Distributed Questionnaires

Response Rate	Total	Percentage
Questionnaire Administered	340	100%
Questionnaires not received	(63)	18.5%
Response Received	277	81%
Invalid response	(16)	4
Valid / usable questionnaires	261	77%

4.3 Data Screening and Cleaning

Before the statistical analysis, the collected data undergo certain clearing and screening. The researcher also accessed the instances or missing data. After the process of entering the data, statistical software was run in order to maintain and preserved appropriate responses, any incomplete and missing data were removed. Seventy-seven data were excluded from the overall so responses due to the outliers or missing information. Based on this, a set of 261 responses were further analysis the Table 4.1 present the summary of distributed questionnaire.

4.4 Demographic Profile

In this section, descriptive statistics were employed to describe the demographic aspects of the participants such as, gender, age, marital status, level of education, nationality, marital status, college of study and the type of mobile operators they used. Table 4.2 indicates that the highest number of the respondent in the sample were males 180 who is represents 69 per cent, and the rest were female 81 representing

31 percent, the result of the age indicates that the group of ages (18- 25) were 24 percent. Followed by (26-35) about 30 percent and the age group of (36-45) and (46-55) were 25 and 16 percent respectively. Lastly, (56 +) were 5 per cent. With regard to marital status of the respondents, 38 percent of them were single, married is about 44 percent, while 17 percent are divorcee, and lastly, 1 percent was a widow. Table 4.2 shows that Master students and PhD students participate by 29 percent and 39 percent respectively while the bachelor degree represents 32 percent in this study. In terms of Colleges 46 percent were from COB, then, 27 percent were coming from GOLGIS and CAS. The majority of the mobile phone subscribers followed by U mobile 40 percent, then DiGi by 30 percent, and Maxis by 17 percent and Celcom and others represent 6 percent and 7 percent respectively.

Table 4.2
Respondent's profile

		Frequency	Percentage
Gender	Male	180	69%
	Female	81	31%
Age	18 to 25 years	62	24%
	26 to 35 years	79	30%
	36 to 46 years	65	25%
	46 to 55 years	43	16%
	Over 56 years	12	5%
Marital status	Single	100	38%
	Married	114	44%

	Divorcee	45	17%
	Widow	2	1%
Education	Bachelor Degree	102	39%
	Master	76	29%
	PhD	83	39%
School	1 COB	120	46%
	2 CAS	70	27%
	3 COLGIS	71	27%
Mobile Operators	U mobile	105	40%
	DiGi	79	30%
	Maxis	44	17%
	Other	18	7%
		15	6%
	Celcom		

4.5 Preliminary Analysis

Hair et al. (2006; 2010) and Lee (2010) stated that the need for statistical testing uses important assumptions such as normality and homoscedasticity associated with research variables to be able to confirm results and effects caused by the prevalence of errors. Therefore, this study will consider prior testing relating to normality, outliers, multicollinearity and homoscedasticity.

4.6 Descriptive Analysis

Table 4.3 indicates the result of the mean and standard deviation of the dependent variable customer satisfaction and independent variable service quality, perceived value and brand awareness. the possible mean score based on five point Likert scales were categorized in to three level of low (1- 2.00), moderate(2.01-3.00) and high (3.01-5.00) it is based on class interval formula which class interval width= highest scale value lowest scale value/ number of categories this study is based on five point Likert scale class interval width $= (5-1)/2$.

Table 4.3
Descriptive Statistics for the Variables

Variable	Number	Minimum	Maximum	Mean	Std. Deviation
SQ	261	3.00	5.00	4.3903	.39115
PV	261	3.00	5.00	4.4092	.43948
BA	261	2.40	5.00	3.4736	.61428
CS	261	3.00	5.00	4.4877	.44715

4.7 Outliers

Another important step of data screening is an assessment of outlier. According (Mahmoud, Muharam and Masud, 2015) outlier is the extreme observation which may perhaps have a substantial adverse effect on the results. The issues of outlier usually have exceptional low or high value, a unique mixture a construct of values upon many constructs, which cause the assessment to stand out from rest (Hair et al., 2010; Bryn, 2010).

Using the multivariate analysis might consequently demonstrate the treatment and detection of outliers. Both the multivariate and univariate outliers were observed in this research. The univariate outliers have been investigated through distinguishing the cases with higher z-score values. According to Tabachnick & Fidell, (2007), any situation with the value of a standardised z-score that is above 3.29 is viewed as a possible univariate outlier and thus, in this research, only 16 cases have been recognised and excluded. So that, the final usage and valid respondent left with 261.

Again, the Mahalanobis Distance (D) is conducted in order to obtain and test the multivariate outlying problems (Hair et al., 2010) as stated Tabachnick and Fidel (2007). The records of items used in the study are tested under the selected degree of freedom in the Chi-square table; in this case, 24 items were adopted at the degree of freedom of $P < 0.05$ which discovered the standard to be 35.42. Thus, any number that has a Mahalanobis Distance of 35.42 or above is viewed as a multivariate outlier that should be erased. Lucky, there is no case that higher the standard of 35.42 Mahalanobis Distance.

4.8 Normality Test

Tabachnick and Fidell (2007), stated that normality is considered as one of the underlying assumptions for regression analysis is that the variables must be normally distributed. Either statistical or graphical approaches generally measure normality. In graphical method, normality can be identified through via histogram residual plots; which means to mention of the data distribution of the variables and their correspondence to a normal distribution. However, the basic technique for statistical normality is the skewness and kurtosis (Mahmoud, Ahmed & Poespowidjojo, 2018). Tabachnick and Fidell, (2007), stated that the residuals are normally and independently distributed if the assumption is met. The normality assumption was analysed and diagnosed in this statistical research method were employed based on table 4.4 the values of Skewness shown less than 2, while the values of Kurtosis are below 7. The acceptable range of Skewness is < 2 and < 7 for the Kurtosis (Gorondutse & Hilman, 2014). Therefore, it can be concluded that the value is in the acceptable range.

Table 4.4

Normality analysis: Skewness and Kurtosis Ratio

Constructs	Skewness		Kurtosis			
	Statistics	Std. Error	Statistic	Std. Error		
SQ	-.261	.151	-1.73	-.464	.300	-1.55
PV	-.541	.151	-3.58	-.187	.300	-.623
BA	.763	.151	5.05	.336	.300	1.12
CS	-.881	.151	5.83	.489	.300	1.63

a. $N=261$

4.9 Multicollinearity

According to Mahmoud, Ahmed & Poespowidjojo, (2018) multicollinearity is defined as situations in which two or above two independent variables were tremendously associated. The easiest way of detecting Multicollinearity is through using correlation matrix of predicting variable predicting variables (Tabachnich & Fidell, 2007). Some researcher mentioned that correlation of 0.7 and above are considering high (Sekaran and Bougie, 2010), according to Hair et al., (2010) indicated a correlation of 0.9 and above is considered high. Moktar and Maiyaki (2011), also stated that multicollinearity makes the assessment is weaker due to the interrelationship between two or more variables will develop the extent of error or mistakes resulted in the interrelationship of variables that include unnecessary data. The explanation for the multicollinearity problem is to erase the interrelated variables (Mahmoud, Muharam & Masud, 2015).

The alternative method for checking multicollinearity is the variance inflated factor (VIF) and the tolerance value. Any VIF above 10 and tolerance value below .10 shows a problem of multicollinearity (Hair Jr. et al., 2010). Table 4.5 below displays the VIF and the Tolerance value of the independent variables

Table 4.5

Tolerance and VIF Collinearity Statistics

Variables	Tolerance	VIF
SQ	0.828	1.208
PV	0.853	1.172
BA	0.910	1.098

Table 4.5 Shows that there is no multicollinearity among predicting variables because all VIF values were above 10 and tolerance values were below .10 respectively.

4.10 Homoscedasticity

The statistical assumption in which a situation where the variance of the criterion variable is approximately the same at the different level of the predicting variables are said to be Homoscedasticity (Hair et al., 2010). Homoscedasticity is often used to measure in visual inspection of the scatter plot of the regression residuals. Homoscedasticity shows an indication when the width of the band of the residuals is approximately the same at different levels of the dependent variable and scatter plots demonstration pattern of residuals normally disseminated around the mean (Berry & Feildman, 1985). The assumption of homoscedasticity was analysed using regression in SPSS method. An examination of residual plots for all the independent variables presented shows that the assumption of homoscedasticity was not violated.

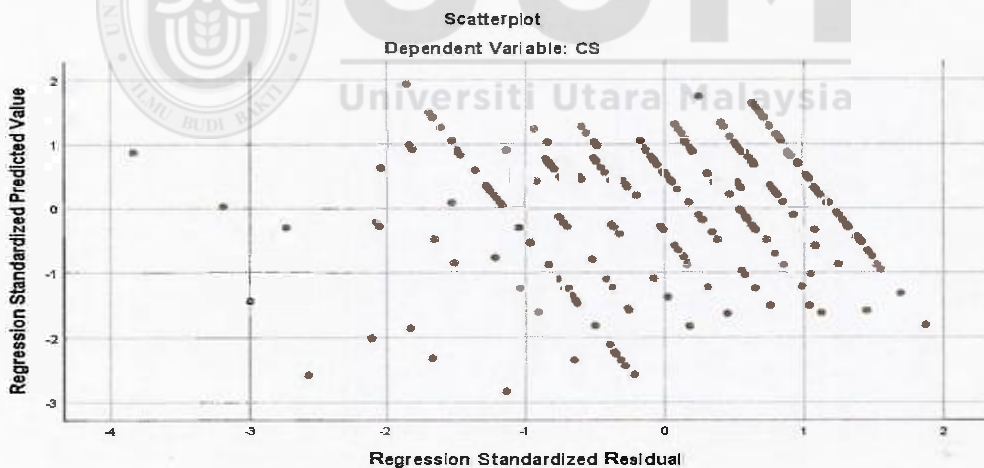


Figure 4.1 *Residual Plots*

Residual Plots- SQ, PV, BA and CS From Figure 4.1 output shown that the points do not form a clear pattern and the points spread out above and below the number 0 on the Y. So it can be determined that there is no problem of heteroscedasticity in the regression model.

4.11 Hypothesis Testing

This section will be discussed all the result for the hypotheses of the study with correlation test and multiple regression analysis. The SPSS 25.0 was employed to analyse the results to accept or reject the hypotheses.

4.11.1 Pearson Correlation Analysis

In order to test the hypothesis 1 (One) to 3 (three), a Pearson correlation analysis was employed to access the nature of the relationship between the two variables, independent variable and dependent variable. The correlation analysis shows the direction, strength, and significance of the bivariate relationships of the study variables (Sekaran, 2003). The association will enable the reader to understand whether there is any relationship between these variables.

This research was designed to examine the relationship between the dimensions of three independent variables; service quality, perceived value and brand awareness with dependent variable; customer satisfaction. In order to obtain the strength of the relationship between two variables and its linear direction, the Pearson correlation test was conducted by (Pallant, 2007). He claims that if the value of the relationship is 0, it means there is no relationship between two variables. Meanwhile, if the value is 1, it indicates that there is a perfect relationship. Table 4.6 below as establish by Cohen (Pallant, 2007) describe the guidelines for the strong relationship between variables.

Table 4.6

Correlation Value and the Strength of Relationship

Correlation Value	The Strength of the Relationship
$r = 0.10$ to 0.29 / $r = -0.10$ to -0.29	Weak
$r = 0.30$ to 0.49 / $r = -0.30$ to -0.49	Medium
$r = 0.50$ to 1.00 / $r = -0.50$ to -1.00	Strong

Table 4.7 shows that the relationship between three independent variables; entrepreneurial orientation, solidarity and business strategy with dependent variable; firm performance.

Based on Table 4.7, the relationship between variables, which are service quality and perceived value has a positive relationship with customer satisfaction. The direction of relationships is positive indicates that if the value of service quality and perceived value increase, it will lead to an increase in the level of customer satisfaction. However, the variable of brand awareness shows negative and no significant relationship with customer satisfaction.

Regarding the strength of the relationship, the findings show that the strength of the relationship between service quality and perceived value with customer satisfaction is considered as medium. However, the strength of the relationship for brand awareness is considered weak.

As illustrated in Table 4.7 the details of the results of the Pearson correlation in order to identify the relationship between the variables. The relationship between service quality was obtained a positive and significant relationship which the correlation

coefficient, $r = 0.301$, $p < 0.01$. Besides that, the perceived value indicates a significant positive relationship with customer satisfaction with a correlation of $r = 0.243$ $p < 0.01$. However, for the brand awareness, there is no relationship with the customer satisfaction and it has a negative relationship with $r = -0.171$ $p > 0.01$. The details are shown in Table 4.7.

Table 4.7

The Results of Pearson Correlation Analysis

Variables	SQ	PV	BA	CS
SQ	1			
PV	.364**	1		
BA	-.272**	-.215**	1	
CS	.301**	.243**	-.171**	1

**. Correlation is significant at the 0.01 level (1-tailed).

Hence, it can be concluded that hypothesis One and Two were accepted. However, hypothesis Three was rejected. The results can be seen on Table 4.8.

Table 4.8

The Result of Hypothesis Testing for Correlational Test

Hypothesis	Description	Result
H1	There is a significant relationship between service quality and customer satisfaction.	Accepted
H2	There is a significant relationship between perceived value and customer satisfaction	Accepted
H3	There is a significant relationship between Brand awareness and customer satisfaction	Rejected

4.11.2 Multiple Regression Analysis

Multiple regressions were utilised to test the effect of many independent variables on the dependent variable continually. This procedure helps researchers to know by how much a set of independent variables is illustrating the variance in the dependent

variable (Cavana et al, 2001). Thus, this study, the correlation between customer satisfaction and its determinants were analysed with the use of standard regression analysis. This is because Sakaran and Roger (2013), indicated that standard regression permitted the whole variables of the research to be inserted into the model at one time and examined based on variance contribution.

The multiple regression analysis results using the standardized model is portrayed table 4.9 indicating the R- square 32.6 Percent and adjusted R- square of 30.3 per cent, this means that the variables such as service quality, perceived value and brand awareness as predicting of customer satisfaction illustrated only 32. 6 percent of factors that influence customer satisfaction.

Table 4.9
Summary of the standard multiple regression Model (N= 261)

Model	R	R square	Adjusted R square	Std. Error of the Estimate
1	.341 ^a	.326	.303	.42276

a. Predicators :(Constant), Service quality, service quality, perceived value and brand awareness.

b. Dependent variable : customer satisfaction

Then again the coefficient analyses results show service quality, perceived value have a significant influence on customer satisfaction. Based on table 4.9 the result of the variable is significant at $p > 0.00$. the outcome display that factors; service quality, perceived value have $p > 0.00$, 0.025 respectively which indicates that all the two factors are significant in the study at 0.00 level of significant while brand awareness

is insignificant with $p > 0.205$. Table 4.10 provides the summary of the result of regression analysis.

Table 4.10
Regression Coefficients

Model	Beta	T-value	Sig./P-value
(Constant)		6.773	.000
SQ	.227	3.528	.000
PV	.143	2.256	.025
BA	-.078	-1.270	.205

Dependent Variable: CS, $** < 0.00$, R Square = .32.6, F-value = 11.288**

The result of the hypothesis testing is summarized by Table 4.11

Table 4.11
The Result of Hypothesis Testing for Correlational Test

Hypothesis	Description	Result
H1	There is a significant relationship between service quality and customer satisfaction.	Accepted
H2	There is a significant relationship between perceived value and customer satisfaction	Accepted
H3	There is a significant relationship between Brand awareness and customer satisfaction	Rejected

4.12 Conclusion

This chapter was discussed the statistical results of this study and the three leading hypotheses were tested together. In the next chapter, the researcher will also discuss the outcomes and proposed suggestions for future.

CHAPTER FIVE

DISCUSSION, RECOMMENDATION AND CONCLUSION

5.1 Introduction

This chapter will discuss the results from the independent variable (service quality, perceived value and brand awareness) the independent variable (customer satisfaction) further, the implications of research findings both theoretical and policy are reported together with limitation and recommendations of future research.

5.2 Summary of Findings

The main purpose of this study is to investigate the correlation between independent variables (service quality, perceived value and brand awareness) toward dependent variable (customer satisfaction) among international student Universiti Utara Malaysia. A target population consists of 261 respondents from an international student in UUM were collected. Moreover, the data collection technique used this research was a questionnaire to obtain a response from the participants, the questionnaire of study comprises two sections. The first section represents the demographic variable such as gender, age, marital status, education level school and mobile operators while the second section describes variable of independent variable such as service quality, perceived value, brand awareness and dependent variable customer satisfaction. Therefore, the chapter discussed the research findings to provide an answer to each research questions highlighted in chapter one.

5.2.1 Service Quality and Customer Satisfaction

The SPSS 25 was used to test Hypothesis of the first independent variable which is the effect of service quality towards customer satisfaction to obtain the path coefficient value 0.301 * with a significant level of $\alpha = 0.01$ after that, the hypothesis is accepted. This can be explained the coefficient is positive and significant pathways which can be understood that the determinant of service quality to customer satisfaction. This result corresponds with most researchers who found service quality has a positive relationship with customer satisfaction (Mittal, & Lassar, 1998).

These findings mean that firms that provide high-quality service can make attraction to the prospective customers and keep the old ones. Customers judge the quality of service by comparing what they feel from the company should provide and make a comparison to other firms actual service performance, for this reason, the quality of service is essential for satisfying customer. Service firms have concerned the way they can increase their market share and profitability, and they place much consideration on quality service as critical strategies for competitive differentiation.

The findings of this research are consistent with the previous studies from (Tan, Oriade, & Fallon, 2014). This means service quality has positively correlated to customer satisfaction. According to Cronin and Taylor, (1992) providing superior service can assist customer retention and makes repeat customer purchase decision which in turn increase profitability and eventually produce high. For this reason, mobile service providers should consider service quality because of its effect on customer satisfaction.

5.2.2 Perceived Value and Customer Satisfaction

The SPSS 25 was utilised to test Hypothesis of the second independent variable which the effect of customer perceived value towards customer satisfaction to obtain the path coefficient value .243 * with a significant level of $= 0.01$, after that, the hypothesis is accepted. This can be explained the coefficient is positive and significant pathways can be understood that the predictor of perceived value effect customer satisfaction. This result corresponds with most researchers found perceived value has been recognised as a significant determinant of customer satisfaction (Patterson and Spreng, 1997; Ryu et al. 2010).

This finding showed that firms that provide high value could achieve to meet customer needs and wants which is the ultimate goal that most firms strive to attain. Perceived value is seen as the essential aim that buyers will judge whether to use mobile service or not and it mainly depends on the extent of greater benefits compared to the cost. Therefore, giving higher to customers will increase the satisfaction of customers.

This finding also parallels with the study of (Salleh, & Mahmood, 2012) which found customer perceived value is the significant predictor of customer satisfaction. The study further mention customers who recognise that they obtain a value for money are more satisfied than customers who do not recognise they obtain a value for money .therefore, based on this result mobile service operators should provide suitable value to win the competition.

5.2.3 Brand Awareness and Customer Satisfaction

The SPSS 25 was used to test Hypothesis of the third independent variable which the effect of brand awareness customer satisfaction to obtain the path coefficient value - .171* and it is less significant at 0.01 after that, the hypothesis is rejected. This can be explained that the independent variable is brand awareness does not have a significant relationship with customer satisfaction.

The results of the study show that brand awareness has no significant relationship with customer satisfaction. This is because brand awareness itself cannot make consumers have higher desire and preference for the product. Therefore, brand awareness is only familiar with the brand. According to Aaker (1991), brand awareness refers to buyer's ability to identify or recall that a particular brand name is a member of a specific product category. Based on the findings of this research, brand awareness only not sufficient to satisfy consumer desires on product, as mentioned in the discussion, consumer prefer to choice the product the quality of service it provides and the perceived value that is different from the other competing firms, for this reason, perceived value is considered determinants of customer satisfaction . However, some researchers Rossiter and Percy, (1997) proved that brand awareness is seen as a critical factor that influences the decision of customers when purchasing the product. Since brand awareness can increase the chance of purchasing the intention of a particular brand among the consideration of others. Marketers put great attention on the approaches to develop brand awareness. Another study indicated that if consumers are more aware of the brand, this reflects that the awareness of the brand is also high which leads to increase confidence related to that brand also high (Laroche, Kim & Zhou, 1996).

5.3 Implication of Study

5.3.1 Theoretical Implications

This research has mostly contributed by adding to existing literature on student satisfaction particularly, mobile service operators. An understanding of the direct effect of the significant predictors such as service quality, perceived value and brand awareness that affect international student satisfaction in mobile cellular providers will give the managers of mobile operators in a better position to design suitable strategies to deal with marketing practices that will improve the advantage of the operators.

In the theoretical perspectives, the contribution of this research is from to identifying how the Service quality, perceived value and brand awareness that determine international student satisfaction in mobile cellular providers. However, these studies add to the literature by examining the factors stated in the context and develop a theoretical framework that examines the relationship between the three factors mentioned above with mobile operators.

Moreover, the research about international student's satisfaction towards mobile operators is limited compared to the research that was conducted on mobile service operator. For this reason, this study could contribute to a research paper in Malaysia, which will come with some information for future researchers interested in researching the telecommunication industry, particularly on mobile service.

5.3.2 Practical Implications

This study contributes to the Satisfaction of international student in an attempt to give mobile operators how Service quality, perceived value and brand awareness effect international student. The research will also give managers to develop their quality service to gain new customers and keep existing ones. Similarly, managers will also consider the perceived value in order to add extra unique benefits.

5.4 Limitations of the Research

This research has some limitations should be noted. The first limitation that relates to this research is about a population of the study from which sample was drawn for this research. This research is limited to the international students in University Utara Malaysia only. Due to this limitation that is relating to sampling, the findings of this research cannot be generalised all international student in Malaysia. Therefore, reaching a conclusion from the results of this research should be taken with caution.

The second limitation of this research is the influence that determines the satisfaction of international students was limited only three variables. Despite there are other variables that might give a better understanding to the satisfaction of the students in mobile operators. Finally, the duration of the study was only four months starting from August 2018 to November 2018.

5.5 Recommendations for Future Research

For the next researches that relate to study factors affect the international student's satisfaction. It is recommended that further researchers will need to study larger populations to have larger samples to find the latest findings. To provide a more robust result relating to the satisfaction of mobile service operators.

Besides, future researchers should also identify other factors that determine customer satisfaction. The variables used this study was limited to understand the level of satisfaction comprehensively, and it suggested to expand the variables to obtain reliable study on the context the satisfaction of mobile service operators.

5.6 Conclusion

In this research, factors that affect International students' satisfaction was discussed briefly. Student satisfaction was recognised as a critical factor to measure the effectiveness of telecommunication service operators. The result reveals that both service quality and perceived value have a significant relationship with student satisfaction while brand awareness is less significant. Therefore, it will assist Mobile service providers to upgrade their services based on student feedback.

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Appendices

Appendix 1: Questionnaire



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A SURVEY ON FACTORS INFLUENCING THE SATISFACTION OF INTERNATIONAL STUDENTS TOWARDS MOBIL SERVICE OPERATORS

Dear Sir/Madam,

I am a Masters student at Othman Yeop Abdullah Graduate School of Business, Universiti Utara Malaysia conducting a research on factors influencing the satisfaction of mobile service in international student in Universiti Utara Malaysia. This survey is for the purpose of academic exercise and part of the requirement for the award of Master's Degree. Therefore, this questionnaire is aim at obtaining your valuable opinion in order to obtain information needed for the success of the study. Your responses will be treated with ultimate confidence and used strictly for academic purpose. The questionnaire is expected to take only 10 minutes of your precious time to complete.

I greatly appreciate your participation in the study. Thank you for your cooperation and giving part of your time for the survey.

Best regards

Ismail Ali Yusuf
MSc. Students
Universiti Utara Malaysia
Email: Amangudel@gmail.com
Phone number +60189657181

SECTION A

Please provide the appropriate information by ticking [✓] in the box to show your answer

1 Gender

Male []

Female []

1. Age

18 – 25 years [] 26 – 35 years [] 36 – 45 years [] 46 – 55 years [] 56+ []

2. Marital status

Single []

Married []

Divorce []

Widow []

3. Education Level

Bachelor degree [] Master [] PHD []

5 Nationality

Please state: []

6 School

COB []

CAS []

COLGIS []

7 Mobile operator

Celcom []

DiGi []

Maxis []

U mobile []

others []



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SECTION B

1. Service Quality

Base on the following scale, Please circle the appropriate number that best described you in each statement. The numbers below has the following meaning respectively

No	The Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	My current mobile phone service provider has update equipment	1	2	3	4	5
2	When my current mobile phone service provider promises to do something by certain time , it keeps its promise	1	2	3	4	5
3	When I have problem, my service provider show sincere interest in solving it.	1	2	3	4	5
4	My current mobile phone service provider provides its service at time it promises to do so.	1	2	3	4	5
5	The staff at my current mobile phone service provider always willing to help customers	1	2	3	4	5
6	The staff at my current mobile phone service provider customers service are always ready to responds to customer requests promptly	1	2	3	4	5
7	The staff at my current mobile phone service provider are polite.	1	2	3	4	5

2. Perceived value

Base on the following scale, Please circle the appropriate number that best described you in each statement. Then numbers below has the following meaning respectively

No	The statements	Strongly disagree	disagree	neutral	agree	Strongly agree
1	Comparing what I pay to the service I receive I think my service provider provides me good value	1	2	3	4	5
2	This providers service is a better value for money	1	2	3	4	5
3	The provider charges a reasonable price for the service they provide	1	2	3	4	5
4	Compared to what I had to give up, the overall ability of the company to satisfy my wants and needs is high.	1	2	3	4	5
5	Overall, the value of company service to me is high	1	2	3	4	5

3. Brand Awareness

Base on the following scale, Please circle the appropriate number that best described you in each statement. The numbers below has the following meaning respectively.

No	statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I know how this mobile service provider brand looks like	1	2	3	4	5
2	I can quickly recall the logo of this mobile service provider.	1	2	3	4	5
3	When I think mobile service provider this mobile service provider come to my mind due to brand awareness	1	2	3	4	5
4	This mobile service provider that I am using had a well-known brands.	1	2	3	4	5
5	I am aware of this particular mobile service providers	1	2	3	4	5

4. Customer satisfaction

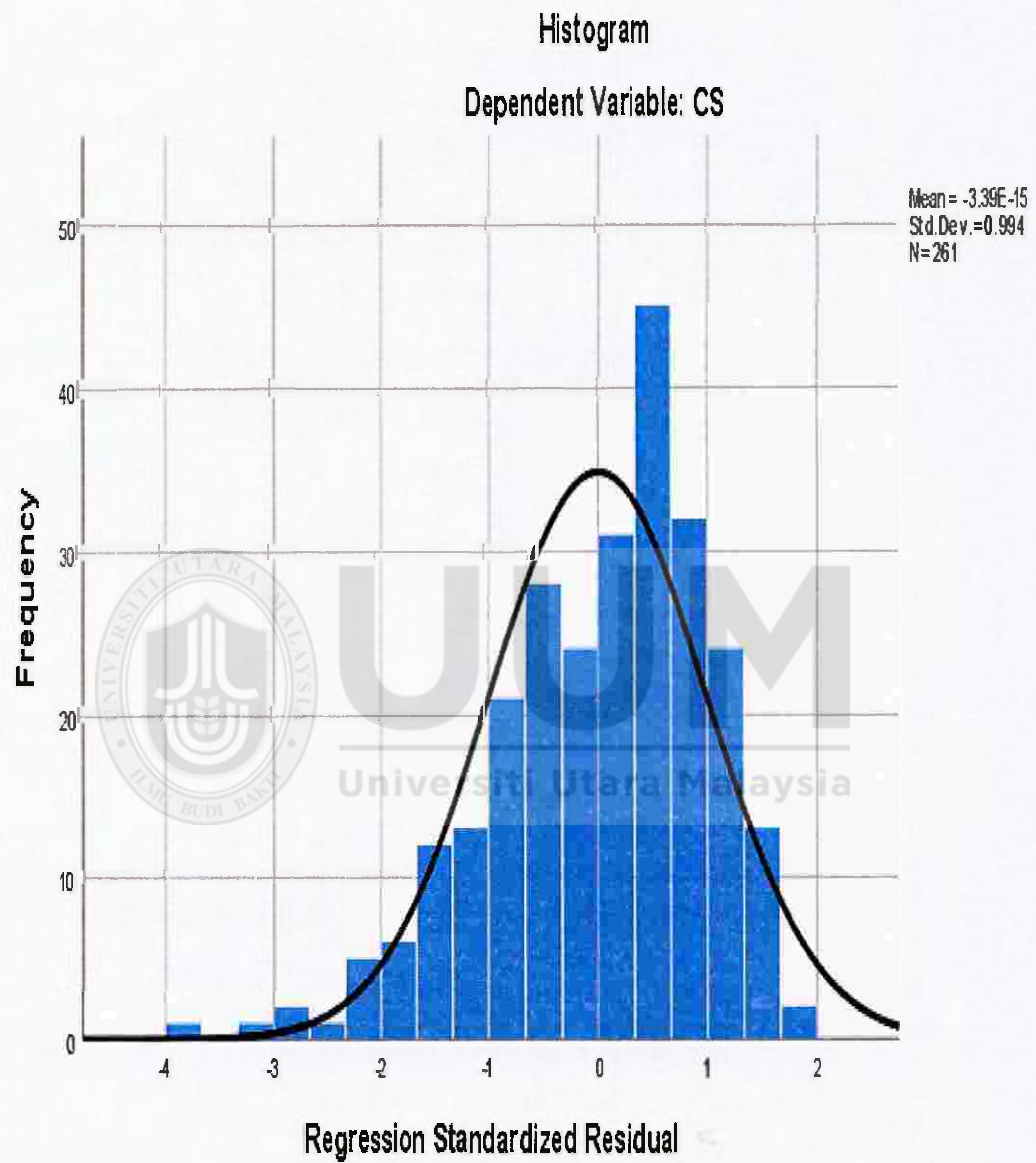
Base on the following scale, Please circle the appropriate number that best described you in each statement. The numbers below has the following meaning respectively.

No	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1	I am satisfied with my decision to choose mobile service	1	2	3	4	5
2	My choice to use this mobile operator is was nice one	1	2	3	4	5
3	I think I did the right thing when I chose this mobile service	1	2	3	4	5
4	I feel that my experience with this mobile service has been enjoyable	1	2	3	4	5
5	I am happy with my current service provider	1	2	3	4	5
6	I feel good about my decision to choose my current service provider	1	2	3	4	5
7	Overall, how much satisfied are you with your mobile service providers service	1	2	3	4	5

End
Thank you so much

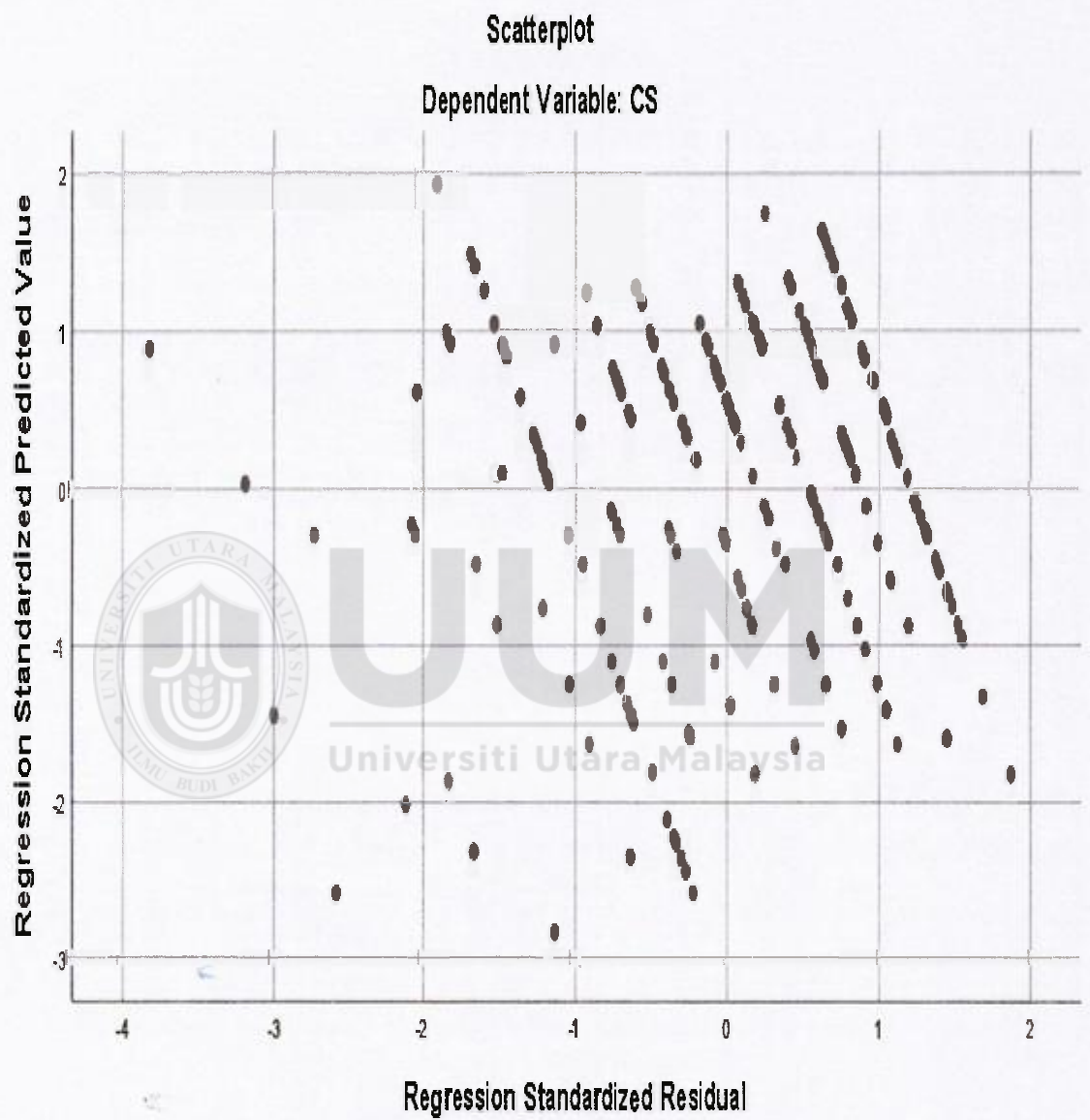
Appendix 2

NORMALITY (GRAPHICAL METHOD)



Appendix 3

Residual Plots



Appendix 4

Sample Size

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	100000	384

Source: Krejcie & Morgan (1970).

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